

Application No. 10/537391
Responsive to the office action dated July 9, 2009

REMARKS

Favorable reconsideration of this application is requested in view of the following remarks.

Claim 1 has been amended as supported by Fig. 9A and the specification at page 4, lines 18-25, page 9, lines 14-18, page 11, lines 8-17, and page 13, line 12 – page 14, line 1. Claim 16 has been amended as supported by Fig. 6B and Fig. 7 and the specification at page 6, lines 6-10 and page 11, lines 8-17. Claim 20 has been amended as supported by Fig. 9B and the specification at page 14, lines 2-13. Claim 21 has been amended as supported by Fig. 4, Fig. 5, and Fig. 10A and the specification at page 9, lines 14-18, page 11, lines 8-17, and page 14, lines 14-23. Claims 22-24 have been added as supported by current claims 1, 20, and 21, respectively. Claims 2-7, 10-13, 16, and 20-21 have been amended editorially.

Claims 1-16 and 20-21 have been rejected under 35 U.S.C. 112, first paragraph, as not complying with the written description requirement. Applicants respectfully traverse this rejection.

Claim 1 has been amended to recite a method in which a plurality of applying steps and a plurality of drying steps are provided alternately. Accordingly, claim 1, claims 2-3, 12, and 16, which depend from claim 1, and claim 21, which includes the same steps as those in claim 1, are well supported by the specification, particularly at page 4, lines 18-25 and page 9, lines 14-18. Further, claim 20, which includes several reagent layers, each of which is formed by a plurality of steps of applying and then drying of the material liquid, also is well supported by the specification, particularly at page 14, lines 2-13.

Claims 4, 10-11, and 13 have been amended to clarify that the material liquid is applied to form the reagent layer.

Claim 6 has been amended to clarify that the material liquid is applied to an area of a bottom surface of the recess as supported by the specification at page 5, lines 3-17.

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Claim 20 has been amended to clarify that the reagent dots in one subgroup overlap the reagent dots in the other subgroup as supported by the specification at page 14, lines 2-13.

Accordingly, claims 1-16 and 20-21 are well supported by the specification, and this rejection should be withdrawn.

Claims 4, 6-7, 10-11, and 13-15 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Applicants respectfully traverse this rejection.

As discussed above, claims 4, 10-11, and 13 have been amended to clarify that the material liquid is applied to form the reagent layer, and claim 6 has been amended to clarify that the material liquid is applied to an area of a bottom surface of the recess as supported by the specification at page 5, lines 3-17.

Accordingly, claims 4, 6-7, 10-11, and 13-15 are clear and well defined, and this rejection should be withdrawn.

Claims 1-3 and 10-11 have been rejected under 35 U.S.C. 102(b) as being anticipated by Deeg et al. (U.S. Patent No. 5,378,638). Applicants respectfully traverse this rejection.

Deeg discloses an analysis element in which several compartments are separated from each other and arranged side by side on the carrier layer, i.e., the horizontal compartmentalization (see Fig. 2, abstract, and coln. 5, line 56 - coln. 6, line 11). Thus, in Deeg, the members of compartment A (11, 13, 15, 17, and 19), B (12 and 16), and C (14 and 18) are not aligned to be just above or under the members in the other compartments (see Fig. 2), and Deeg fails to disclose that the reagent layers separated by the intervening separation layer are aligned with each other in a direction perpendicular to the base plate as claim 1 recites. Accordingly, claim 1 and claims 2-3 and 10-11, which ultimately depend from claim 1, are distinguished from Deeg, and this rejection should be withdrawn.

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Claim 4 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Deeg et al. (U.S. Patent No. 5,378,638) in view of Maddox (U.S. Patent No. 5,212,060). Applicants respectfully traverse this rejection.

Claim 4, which depends from claim 1, is distinguished from Deeg for at least the same reasons as discussed for claim 1 above.

Maddox fails to disclose that the detection zones, i.e., the reagent layers, which are separated by the intervening separation layers, are aligned with each other in a direction perpendicular to the base plate as claim 4 requires. Accordingly, the reference does not remedy the deficiencies of Deeg, and this rejection should be withdrawn.

Claims 5-7 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Deeg et al. (U.S. Patent No. 5,378,638) in view of Cottingham (U.S. Patent No. 5,948,673). Applicants respectfully traverse this rejection.

Claims 5-7, which ultimately depend from claim 1, are distinguished from Deeg for at least the same reasons as discussed for claim 1 above.

Cottingham fails to disclose that the reagent layers separated by the intervening separation layers are aligned with each other in a direction perpendicular to the base plate as claims 5-7 require. Accordingly, the reference does not remedy the deficiencies of Deeg, and this rejection should be withdrawn.

Claims 8-9 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Deeg et al. (U.S. Patent No. 5,378,638) in view of Cottingham (U.S. Patent No. 5,948,673), further in view of Taguchi et al. (U.S. Patent No. 5,681,529). Applicants respectfully traverse this rejection.

Claims 8-9, which depend from claim 5, are distinguished from Deeg in view of Cottingham for at least the same reasons as discussed for claim 5 above.

Taguchi discloses a biological fluid analyzing device that includes sample treating chambers such as chamber 2b in which a reagent has been already applied (see Figs. 1-2 and 9 and coln. 5, line 60 – coln. 6, line 21). Taguchi, however, fails to disclose that the reagent layers in the sample treating chambers are aligned with each other in a direction perpendicular to the base plate as claims 8-9 require (see Figs. 1-2 and 9). Accordingly,

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the reference does not remedy the deficiencies of Deeg and Cottingham, and this rejection should be withdrawn.

Claim 12 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Deeg et al. (U.S. Patent No. 5,378,638) in view of Demers (U.S. Patent No. 6,117,396). Applicants respectfully traverse this rejection.

Claim 12, which depends from claim 1, is distinguished from Deeg for at least the same reasons as discussed for claim 1 above.

Demers fails to disclose that the reagent layers in the sample treating chambers are aligned with each other in a direction perpendicular to the base plate as claim 12 requires. Accordingly, the reference does not remedy the deficiencies of Deeg, and this rejection should be withdrawn.

Claims 13-15 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Deeg et al. (U.S. Patent No. 5,378,638) in view of Hashimoto et al. (U.S. Patent Application Publication No. 2003/0083203). Applicants respectfully traverse this rejection.

Claims 13-15, which ultimately depend from claim 1, are distinguished from Deeg for at least the same reasons as discussed for claim 1 above.

Hashimoto fails to disclose that the reagent layers in the sample treating chambers are aligned with each other in a direction perpendicular to the base plate as claims 13-15 require. Accordingly, Hashimoto does not remedy the deficiencies of Deeg, and this rejection should be withdrawn.

Claim 16 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Deeg et al. (U.S. 5,378,638) in view of Harding et al. (U.S. Patent Application Publication No. 2002/0098114). Applicants respectfully traverse this rejection.

Claim 16, which depends from claim 1, is distinguished from Deeg for at least the same reasons as discussed for claim 1 above.

Harding fails to disclose that the reagent layers separated by the intervening separation layer are aligned with each other in a direction perpendicular to the base plate

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as claim 16 requires. Accordingly, Harding does not remedy the deficiencies of Deeg, and this rejection should be withdrawn.

Claim 20 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Deeg et al. (U.S. Patent No. 5,378,638) in view of Cottingham (U.S. Patent No. 5,948,673) and Dombrowski (U.S. Patent No. 5,047,206). Applicants respectfully traverse this rejection.

Claim 20 recites that each of subgroups of the reagent dots includes a different reagent and that the reagent dots in one subgroup overlap the reagent dots in the other subgroup(s). Deeg discloses that compartments in the same set include the same reagent and that compartments in a different set include different reagent (see abstract). In the analysis element of Deeg, several compartments are separated each other and arranged side by side on the carrier layer, i.e., the horizontal compartmentalization (see Fig. 2, abstract, and coln. 5, line 56 - coln. 6, line 11). Thus, Deeg fails to disclose that the reagent dots included in a subgroup overlap the reagent dots in the other subgroup that contain a different reagent as claim 20 recites. Accordingly, claim 20 is distinguished from Deeg.

Cottingham and Dombrowski fail to disclose that the reagent dots in one subgroup contain a different reagent from that included in the reagent dots in the other subgroups and that the reagent dots in one subgroup overlap those in the other subgroup as claim 20 recites. Accordingly, Cottingham and Dombrowski do not remedy the deficiencies of Deeg, and this rejection should be withdrawn.

Claim 21 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Deeg et al. (U.S. Patent No. 5,378,638) in view of Cottingham (U.S. Patent No. 5,948,673) and Taguchi et al. (U.S. Patent No. 5,681,529). Applicants respectfully traverse this rejection.

Claim 21 recites a method of manufacturing an analytical tool that includes a process to provide a base plate having a flowpath that includes the reagent holding portion, i.e., a recess, and the constant width portion narrower than the recess, both of which include different reagent members. Deeg fails to disclose that the base plate of the

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device includes two portions having different widths, i.e., the recess and constant width portion narrower than the recess, and that in both recess and constant width portion, different reagent members are formed as claim 21 recites.

Neither Cottingham nor Taguchi discloses that an analytical tool includes the recess and constant width portion narrower than the recess in a flowpath on a base plate and that in both recess and constant width portion, different reagent members are formed as claim 21 recites. Thus, the references fail to remedy the deficiencies of Deeg. Accordingly, claim 21 is distinguished from Deeg in view of Cottingham and Taguchi, and this rejection should be withdrawn.

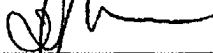
Added claims 22-24 include features recited in claims 1, 20, and 21, respectively. Therefore, claims 22-24 should be allowed when the corresponding claims are allowed.

In view of the above, Applicants request reconsideration of the application in the form of a Notice of Allowance.

Respectfully submitted,



HAMRE, SCHUMANN, MUELLER &
LARSON, P.C.
P.O. Box 2902
Minneapolis, MN 55402-0902
(612) 455-3800

By: 
Douglas P. Mueller
Reg. No. 30,300

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DPM/my/jls